PTO/SB/08A (08-00)

ed for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to res

substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet of

Comple	te if Known
Application Number	09/884,424
Filing Date	June 19, 2001
First Named Inventor	Robert Mays
Group Art Unit	2671
Examiner Name	Unassigned
Attorney Docket Number	MYS-01-08-12

	T T	U.S. Patent Do	cument	Υ		Pages, Columns, Lines,
Examiner Initials*	Cite No.1	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear
110	B1	3,610,926		Kastner et al.	10-05-1971	
nc	82	4,296, 994		Quick et al.	10-27-1981	
nc	B3	4,359,259		Homer et al.	11-16-1982	
110	B4	4,392,709		Homer et al.	07-12-1983	
AC	B5	4,807,978	1	Grinberg et al.	02-28-1989	RECEIVE
ne	B6	4,897,541		Phillips	01-30-1990	TILOLIVE
NC	B7	4,991,150		Wixom	02-05-1991	200 0 0 0004
MC	B8	5,008,890		McFarlane	04-16-1991	APR 2 3 2004
ALC	B9	5,103,324		Brandstetter	04-07-1992	
MC	B10	5,245,623		McFarlane	09-14-1993	Technology Center 20
91C	B11	5,325,386		Jewell et al.	06-28-1994	
nc	B12	5,369,415	-	Richard et al.	11-29-1994	-
91C	B13	5,399,315	<u> </u>	Paz-Pujalt et al.	03-21-1995	
nc	B14	5,411,709		Furuki et al.	05-02-1995	
MC	B15	5,442,433 ·		Hoshino et al.	08-15-1995	
MC	B16	5,446,334	 	Gaffney	08-29-1995	
nc	B17	5,467,104	 	Furness, III et al.	11-14-1995	
4C	B18	5,596,339		Furness, III et al.	01-21-1997	· · · · · · · · · · · · · · · · · · ·
nc	B19	5,602,679	 	Dolgoff et al.	02-11-1997	
nc	B20	5,622,868		Clarke et al.	04-22-1997	
SIC	B21	5,659,327	 	Fumess III, et al.	08-19-1997	
nc	B22	5,822,091	 	Baker	10-13-1998	
SIC.	B23	5,857,042	 	Robertson et al.	01-05-1999	
ne	B24	5,886,822	-	Spitzer	03-23-1999	
OIC.	B25	6,008,781	 	Fumess, III et al.	12-28-1999	
nc.	B26	6,079,252	- 	Tabler et al.	06-27-2000	
41C	B27	6,081,430		La Rue	06-27-2000	
ne	B28	6,083,767	+	Tjaden et al.	07-04-2000	
nc	B29	6,284,546		Bryning et al.	09-04-2001	
11C	B30	6,304,894		Ford, Joseph Earl	10-16-2001	
ne	B31	6,449,066		Ams et al.	09-10-2002	
me	B32	6.452.700	+ ···	Mays Jr., Robert	09-17-2002	
uc	B33	6,486,984	 	Baney et al.	11-26-2002	
AIC	B34	6,542,264/	V AT	Agranat et al.	04-01-2003	
xaminer	1	alk H		1 , 3, 0, 0, 0, 0, 0	Date	-//-
Signature		/////	7/1/1///.		Considered	3/9/05

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{&#}x27;Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴Applicant is to place a check mark here if English tanguage Translation is attached.

PTO/SB/08A (08-00)

Appreced for use through 10/31/2002. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

Compl	ete if Known
Application Number	09/884,424
Filing Date	June 19, 2001
First Named Inventor	Robert Mays
Group Art Unit	2671
Examiner Name	Unassigned
Attorney Docket Number	MYS-01-08-12

OTHER PRIO	R ART -	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), litle of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	025	Mays, Robert Jr. "Computer Backplane Employing Free-Space Optical Interconnect," U.S. Patent	
nc	B35	Application Publication 2002/0089709, Published on July 11, 2002.	
in.	B36	Mays, Robert Jr. "Network Routing Employing Free-Space Optical Broadcasting," U.S. Patent Application	
no	530	Publication 2002/0191254. Published on December 19, 2002.	
n.		"United States Frequency Allocations-1996," http://www.autoid.org/documents/freqallochrt.pdf	
nc	B37	·	
		Mays, Robert Jr. *Filtering Technique For Free Space Interconnects,* U.S. Patent Application Publication	
mc	B38	2002/0024702. Published on February 28, 2002.	
7 0		Mays, Robert Jr. *Polarized-Holographic Filtering Providing Improved Extinction Ratio. U.S. Patent	_
nc	B 39	Application Publication 2002/0167698. Published on November 14, 2002.	
nc	-	Stewart, James E. * Optical Principles and Technology For Engineers,* Library of Congress Cataloging-in-	_
ac	B40	Publication Data, 1996, pp. 45-81.	
	<u> </u>	Hariharan, P. "Optical Holography: Principles, Techniques, and Applications," Library of Congress	_
nc	B41	Cataloging-in-Publication Data, 1996, pp. 213-123.	
		RECEIVED	_
÷		APR 2 3 2084	
		Technology Center 2600)
			_

Examiner Signature Date Considered 3/9/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Oraw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

Please type a plus sign (+) inside this bear PA

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	for form 1449A/F	$\overline{}$	APR 0 8 2002		unless it displays a valid OMB control numl	per.
		P		Application Number	09/884,424	Ė
INFOR	RMATION	DIŠ	OSURE PETCANT	Filing Date	June 19, 2001 RECE	VED
STATI	EMENT BY	Y AF	PLICANT	First Named Inventor	Mays Ir Robert	
		•		Group Art Unit	2671 APR 0 (]
(U	se as many sheet	s as n	ecessary)	Examiner Name	Unassigned Iechnology C	enter 260
Sheet	1	of	2	Attorney Docket Number	MVC 01 00 12	1

				U.S. PATENT DOCUM	IENTS	
Examiner Initials*	Cite No.'	U.S. Patent Documen Number	IGnd Code ² (# known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
nc	AA	3,751,132		Croh	08-07-1973	
MC	AB	3,785,736		Spitz et al.	01-15-1974	
ac	AC	4,057,319		Ash et al.	11-08-1977	
MC	AD	4,710,605		Presby	12-01-1987	
4C	AE	4,817,207		Smith et al.	03-28-1989	
nc	AF	4,932,989		Presby	06-12-1990	
ur	AG	4,953,954		Ewbank et al.	09-04-1990	
MC	AH	5,011,254		Edwards et al.	04-30-1991	
AC	AI	5,140,657		Thylen	08-08-1992	
AC	AJ	5,256,851		Presby	10-26-1993	
nc	AK	5,446,572		Husbands et al.	08-29-1995	
MC	AL	5,446,816		Shiraishi et al.	08-29-1995	
hc	AM	5,515,194		Kanterakis et al.	05-07-1996	
MC	AN	5,521,913		Gridley	05-28-1996	
nc	AO	5,677,778		Kanterakis	10-14-1997	
40	AP	5,699,464		Marcuse et al.	12-16-1997	
RC	AQ	5,772,720		Talra-Griffin et al.	06-30-1998	
40	AR	5,793,919		Payne et al.	08-11-1998	
nc	AS	5,809,198		Weber et al.	09-15-1998	
nc	AT	5,832,147	T	Yeh et al.	11-03-1998	

				FORI	EIGN PATENT DOCUMENTS			
			oreign Patent Documen			Date of Publication of	Pages, Columns, Lines.	T
Examiner Initials*	Cite No.'	Office ³	Number ⁴	Kind Code [®] (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	T ⁰
AC	AU	wo	99/59766		Brown	11-16-1999		
nc	AV	wo	99/60192		Brown	11-25-1999		\top
40	AW	wo	00/02700		Hoetzel	01-13-2000		\top
20	AX	wo	00/04660		Amadon et al.	01-27-2000		7
nc	AY	wo	00/05026		Berndt	02-17-2000		T
ne	AZ	wo	00/32327		Meyer et al.	06-08-2000		7
41	ВА	wo	00/28359		Feth et al.	10-31-2000		工
					<u></u>	 		4
	<u> </u>	 		2 //		 		

Examiner Signature Date Considered 3/9/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

'Unique citation designation number. 'See attached Kinds of U.S. Patent Documents. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substit	tute for form 1449A/P	го	APR 0 8 2002	Complete if Known			
		12		Application Number	09/884,424		
INF	ORMATION D	DISČ	LOSURE	Filing Date	June 19, 2001RECEIVE		
STA	TEMENT BY	AP	PLICANT	First Named Inventor	Mays, Jr., Robert APR 0 9 20		
				Group Art Unit	2671		
·	(use as many sheets	as ne	cessary)	Examiner Name	Unassigned Technology Center		
Sheet	2	of	2	Attorney Docket Number	MYS-01-08-12		

		U.S. Patent Docume			Date of Publication of	Pages, Columns, Lines,	
Examiner Cite thitials* No.	Cite No.'	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Refevant Passages or Relevant Figures Appear	
AC	88	5,915,097		Chao	06-22-1999		
Ma	ВС	5,935,288		DiGiovanni et al.	08-10-1999		
MC	8D	5,943,149		Ceams et al.	08-24-1999		
uc	BE	6,055,099		Webb	04-25-2000		
nc	BF	6,072,579		Funato	06-06-2000		
uc	BG	6,144,472		Knox	11-07-2000		
nc	вн	6,151,144		Knox	11-21-2000		
no	ВІ	6,185,215		Aho	02-06-2001		
na	BJ	6,246,026		Vergeest	06-12-2001		
nc	8K	6,246,680		Muller et al.	06-12-2001		
ac	BL	6,314,210		Fukushima et al.	11-06-2001		
nc	.8м	09/648,847		Mays	08-25-2000		
MC	BN	09/851,857		Mays	05-09-2001		
MC	во	09/884,459		Mays	06-19-2001		
ac	8P	09/884,562		Mays	06-19-2001		
						· · ·	
		 		 			

		Fore	ign Patent Docume			Date of Publication of	Pages, Columns, Lines,	\top
	Cite No.	Office ³	Kind Code ³ ce ³ Number ⁴ (# known)		Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	r
								\pm
								+
	:							‡
								\top
•				2				T

*EXAMINER: Initial if reference considered, whether or not distion is in conformance with MPEP 609. Draw line through distion if not in conformance and not considered. Include copy of this form with next communication to applicant.

Considered

'Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁴Applicant is to place a check mark here if English language Translation is attached.

Signature

Burden Hour Statement: This form is estimated to take 2,0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box

→ 🛨

PTO/SB/08A (08-00)
Approved for use through 10/31/2002, QMB 0661-UX31
U.S. Patent and Trademark Office; U.S. DEPARTM-NT OF COMMERCE
TO B collection of information unless it deplays a part of the par

Substitute fo	or form 1449A/PTC)		Complete If Known		
			•	Application Number	09/884,424	
INFOR	RMATION E	DISCL	OSURE	Filing Date	June 19, 2001	
STATE	EMENT BY	APP	LICANT	First Named Inventor	Robert Mays, Jr.	
				Group Art Unit	2671	
(US	e as many shoots	as neces	sary)	Examiner Name	Unassigned	
Sheet	1	of	1	Attorney Docket Number	MYS-01-08-12	

	T T	U.S. Patent Do	Downerd			Parses Columns Large
Examiner Initials*	Cite No.'	Number	Kind Code* (if known)	Name of Patentee or Applicant of Cred Uccument	Clate of Publication of Utsel Document MM-DO-YYYY	Pages, Columns, Lines, Where Relevant Passages or Hatevant Figures Appear
nc	C1	5,708,144	81	Erteza	01-06-1998	
						·
						
	1 1		1			
.,	 -					······································
	┿╾╌┼╴		╅╾┈┈┤			
	+					
•	+				ļ	
	↓					
	<u> </u>					
	<u></u>					
						· · · · · · · · · · · · · · · · · · ·
	1		1			
,	 -		+			
	 					
	1 		┼─╌			
	+		 			
.		<u>·</u>	4			
	<u> </u>		 			
	1					
			1			
	 		1	•		
	 		+			
	 		 			
	 		- 			
	 		ļ			
	├		<u> </u>			
	1					
	1I					
			N/ 12/1			/
xaminer		6171	12/11/	-	Date	2/1 =
ignature		UYIH	MIVYA	_	Considered	3/9/05

^{*}EXAMINER* tribbs it retarence considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if rist in conformance and not considered, include copy of this form with next communication to applicant.

*Unique citation designation number. "Sou attached Kinds of U.S. Patent Documents. "Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). "For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial furnition of the potent document." Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. "Applicant is to phoce a check, mark here it English language Fransiation is attached.

Burden Hrar Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual cose. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS 1D THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:
BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
☐ FADED TEXT OR DRAWING
☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
☐ SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
☐ GRAY SCALE DOCUMENTS
☐ LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
OTHER:
·

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.